

Listing of the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently amended) A method for producing an automatically pH-adjusting eukaryotic dry powder culture medium, comprising:

(a) determining the ratio of pH-opposing forms of buffer salts required to be added to a eukaryotic dry powder culture medium to automatically provide a desired final pH upon reconstitution of said dry powder culture medium with a solvent comprising water; and

(b) adding amounts of pH-opposing forms of buffer salts to said powder culture medium in the ratio determined in step (a);

to produce an automatically pH-adjusting eukaryotic dry powder culture medium having said desired final pH upon reconstitution and wherein the dry powder culture medium comprises sodium bicarbonate.

2. (Previously presented) The method of claim 1, further comprising packaging said dry powder culture medium.

3. (Previously presented) The method of claim 1, further comprising sterilizing said dry powder culture medium.

4. (Previously presented) The method of claim 3, wherein said sterilization is accomplished by irradiating said dry powder culture medium with gamma rays until said medium is sterile.

5. (Currently amended) The method of claim 1, wherein said medium comprises at least one buffering salt selected from the group consisting of a monobasic buffering salt and a dibasic buffering salt.

6. (Currently amended) The method of claim 5, wherein said monobasic buffering salt is a monobasic phosphate salt and said dibasic buffering salt is a dibasic phosphate salt.

7. (Previously presented) The method of claim 6, wherein said monobasic phosphate salt is a monobasic sodium phosphate salt and said dibasic phosphate salt is a dibasic sodium phosphate salt.

8. (Original) The method of claim 6, wherein at least one of said monobasic or dibasic phosphate salts is a potassium phosphate salt.

9. (Previously presented) The method of claim 1, wherein said dry powder culture medium does not liberate CO₂ upon storage.

10. (Previously presented) An automatically pH-adjusting eukaryotic dry powder culture medium produced by the method of claim 1.

11-14. (Canceled)

15. (Currently amended) A method of cultivating a eukaryotic cell comprising preparing an automatically pH-adjusting eukaryotic dry powder culture medium prepared according to the method of claim 1, reconstituting the medium with ~~at least one~~ a solvent comprising water to form a eukaryotic culture medium solution, and contacting a eukaryotic cell with said solution under conditions favoring ~~cultivation of the~~ growth or differentiation of the eukaryotic cell.

16. (Currently amended) A method of cultivating a eukaryotic cell, comprising reconstituting the culture medium of claim 10 with a solvent comprising water to form a eukaryotic culture medium solution, and contacting the cell with said solution under conditions favoring the ~~cultivation of the~~ growth or differentiation of the eukaryotic cell.

17-21. (Canceled)

22. (Previously presented) The method of claim 16, wherein said eukaryotic cell is a yeast cell, a plant cell, or a cell line derived therefrom.

23. (Previously presented) The method of claim 15, wherein said eukaryotic cell is a yeast cell, a plant cell, or a cell line derived therefrom.

24. (Previously presented) The method of claim 16, wherein said eukaryotic cell is an animal cell or a cell line derived therefrom.

25. (Previously presented) The method of claim 15, wherein said eukaryotic cell is an animal cell or a cell line derived therefrom.

26. (Previously presented) The method of claim 24, wherein said animal cell is a mammalian cell or a cell line derived therefrom.

27. (Original) The method of claim 26, wherein said mammalian cell is a human cell or a cell line derived therefrom.

28. (Currently amended) A kit for culturing a eukaryotic cell, comprising one or more containers containing an automatically pH-adjusting eukaryotic dry powder culture medium prepared according to the method of claim 1-~~claims 1,~~

29. (Previously presented) A kit for culturing a eukaryotic cell, comprising one or more containers containing the automatically pH-adjusting eukaryotic dry powder culture medium of claim 10.

30. (Canceled)

31. (Original) The kit of claim 28, wherein said kit further comprises one or more additional containers containing at least one additional component selected from the group consisting of at least one growth factor, at least one culture medium supplement, at least one animal tissue extract, at least one animal organ extract, at least one animal gland extract, at least one enzyme, at least one protein, at least one vitamin, at least one cytokine, at least one lipid, at least one trace element, at least one extracellular matrix component, at least one buffer, at least one antibiotic, and at least one viral inhibitor.

32. (Previously presented) The kit of claim 29, wherein said kit further comprises one or more additional containers containing at least one additional component selected from the group consisting of at least one growth factor, at least one culture medium supplement, at least one animal tissue extract, at least one animal organ extract, at least one animal gland extract, at least one enzyme, at least one protein, at least one vitamin, at least one cytokine, at least one lipid, at least one trace element, at least one extracellular matrix component, at least one buffer, at least one antibiotic, and at least one viral inhibitor.

33. (Original) A composition comprising the automatically pH-adjusting culture medium of claim 10 and at least one cell.

34. (Original) The composition of claim 33, wherein said composition is a powder.

35. (Canceled)

36. (Previously presented) The composition of claim 33, wherein said cell is selected from the group consisting of a yeast cell, a plant cell and an animal cell.

37. (Original) The composition of claim 36, wherein said animal cell is a mammalian cell.

38. (Original) The composition of claim 37, wherein said mammalian cell is a human cell.

39. (Original) The composition of claim 36, wherein said cell is an established or transformed cell line.

40. (Canceled)

41. (Currently amended) The method of claim 40 15, wherein said water is distilled or deionized water.

42-43. (Canceled)

44. (Previously presented) The method of claim 25, wherein said animal cell is a mammalian cell or a cell line derived therefrom.

45. (Previously presented) The method of claim 44, wherein said mammalian cell is a human cell or a cell derived therefrom.

46. (Previously presented) The method of claim 1, further comprising storing the dry powder culture medium at about 0-4°C.

47. (Currently amended) The method of claim 1, further comprising storing the dry powder culture medium at less than about 20°C to ~~about~~ 25°C.

48. (Previously presented) The method of claim 1, wherein the desired final pH upon reconstitution is selected from the group consisting of from about 7.1 to about 7.5, from about 7.1 to about 7.4, from about 7.2 to about 7.4, and from about 7.2 to about 7.3.

49. (Currently amended) The method of claim 5, wherein the at least one buffering salt is in the reconstituted media at a concentration selected from about 0.1 mM to about 10 mM, from about 0.2 mM to about 9 mM, from about 0.3 mM to about 8.5 mM, from about 0.4 mM to about 8 mM, from about 0.5 mM to about 7.5 mM, from about 0.6 mM to about 7 mM, and from about 0.7 mM to about 7 mM and wherein the at least one buffer salt is a phosphate salt.

50-84. (Canceled)